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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/705,564	11/03/2000	Rodric C. Fan	M-8813 US	6675

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EXAMINER

HARRY, ANDREW T

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 07/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/705,564

Applicant(s)

FAN, RODRIC C.

Examiner

Andrew T Harry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 7-8, 17-25 and 27-31 are rejected under 35 U.S.C. 102(e) as being anticipated by *Lee et al.* U.S. Patent 6,374,177 ("*Lee*").

As pertaining to **claims 1, 17 and 25**, *Lee* teaches a radio signal receiving system and method therefor, comprising (see *Lee*, abstract):

a location unit, for providing location information to the system, wherein the location information identifies a current position of the system (see *Lee*, Fig. 1, Ref. 110, and col. 8 lines 32-34);

a frequency selection unit coupled to receive global positioning system (GPS) derived position information from the location unit (see *Lee*, col. 6 lines 40-65); and

a receiving unit coupled to receive from the selection unit, selectable data for tuning a particular frequency, wherein the particular frequency is associated with a radio signal reception area that encompasses the system position (see *Lee*, col. 6 lines 40-65, clearly *Lee*'s device reads the positional information then based in this positional information it retrieves, from an on-line database, radio station information as it pertains to the immediate area).

using the selected data to tune and receive the radio signal (see *Lee*, col. 6 lines 40-65).

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As pertaining to **claims 2 and 18**, *Lee* teaches that the frequency is the transmission frequency of a frequency modulated (FM) broadcast station (see *Lee*, col. 6 lines 61-62).

As pertaining to **claim 3 and 19**, *Lee* teaches that the frequency can be the frequency transmission of a satellite transmitter (see *Lee*, col. 6 lines 61-62, *Lee* teaches that the device can receive RDS/RBDS, Band III, L-Band, S-Band, etc. digital audio broadcast DAB signals and these also can be tuned base don the received information).

As pertaining to **claims 4-5 and 20-21**, *Lee*'s system further comprises a user interface electrically coupled to receive from the selection unit data arranged as radio signal content categories, and to output a menu of the categories to a listener which is output on a visual display (see *Lee*, col. 8 line 63-col. 10 line 19, and Fig. 4).

As pertaining to **claims 7, 8 and 22**, *Lee*'s system further comprises a user interface electrically coupled to receive and relay to the selection unit a user command, that can be verbal (see *Lee*, col. 10 lines 31-39), to select a particular content category in an arrangement of radio signal content categories stored in the selection unit (see *Lee*, col. 8 line 63-col. 10 line 19, and Fig. 4).

As pertaining to **claims 23 and 24**, in *Lee*'s method providing the frequency tuning data comprises a system user selecting one or more content categories via the Internet and World Wide Web (WWW) and downloading via the Internet and WWW to the system the tuning data for selected categories (see *Lee*, col. 6 lines 58- col. 7 line 18, clearly the categories are selected from options downloaded from the Internet and access to the internet inherently leads to the user having access to the WWW).

As pertaining to **claim 27**, *Lee* teaches a method of tuning a mobile radio system (see *Lee*, abstract) comprising the acts of:

providing frequency tuning data to the system (see *Lee*, col. 6 lines 39-65);

providing location information to the system , wherein the location information identifies a current position of the system (see *Lee*, col. 8 lines 32-34);

selecting data for tuning a first particular frequency from the tuning data, wherein the first particular frequency is associated with a first radio signal reception area that encompasses a first position of the system (see *Lee*, col. 6 lines 40-65, clearly *Lee*'s device reads the positional information then based in this positional information it retrieves, from an on-line database, radio station information as it pertains to the immediate area); and

when the current position becomes a second position of the system, automatically selecting data for tuning a second particular frequency from the tuning data, wherein the second particular frequency is associated with a second radio signal reception area that encompasses the second position of the system (see *Lee*, col. 6 lines 40-65, *Lee* states that his invention "automatically tune(s) to comparable station formats when a vehicle travels out of an area..." thus indicating that a second set of tuning data is selected for a second geographic area that the user has moved into).

As pertaining to **claim 28**, *Lee* teaches that the frequency tuning data is arranged in categories of content carried by radio signals (see *Lee*, col. 8 line 62-col.10 line 20), and the data for the second particular frequency is the same content category as the data for the first particular frequency (see *Lee*, col. 6 lines 53-57, *Lee* describes that the channel that is automatically selected is playing the "same program or program type").

As pertaining to **claim 29**, *Lee* teaches that the frequency is the transmission frequency of a frequency modulated (FM) broadcast station (see *Lee*, col. 6 lines 61-62).

As pertaining to **claim 30**, *Lee* teaches that the frequency can be the frequency transmission of a satellite transmitter (see *Lee*, col. 6 lines 61-62, *Lee* teaches that the device can receive RDS/RBDS, Band III, L-Band, S-Band, etc. digital audio broadcast DAB signals and these also can be tuned base don the received information).

As pertaining to **claim 31**, *Lee* teaches that the location information is provided using global positioning system information (see *Lee*, col. 8 lines 32-34).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-13, 15-17 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Lee*, and further in view of *Bruckert et al.* U.S. Patent 5,903,844 ("*Bruckert*").

As pertaining to **claims 9, 17 and 26**, *Lee* teaches a radio signal receiving system and method therefor, comprising (see *Lee*, abstract):

a location unit, for providing location information to the system, wherein the location information identifies a current position of the system (see *Lee*, Fig. 1, Ref. 110, and col. 8 lines 32-34);

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a frequency selection unit coupled to receive global positioning system (GPS) derived position information from the location unit (see *Lee*, col. 6 lines 40-65); and

a receiving unit coupled to receive from the selection unit, selectable data for tuning a particular frequency, wherein the particular frequency is associated with a radio signal reception area that encompasses the system position (see *Lee*, col. 6 lines 40-65, clearly *Lee*'s device reads the positional information then based in this positional information it retrieves, from an on-line database, radio station information as it pertains to the immediate area).

using the selected data to tune and receive the radio signal (see *Lee*, col. 6 lines 40-65).

However, *Lee* is silent on the concept of using a method other than GPS satellites in order to determine the location of his mobile device. *Bruckert* teaches a method by which a mobile cellular device's location is determined without the assistance of GPS satellites (see *Bruckert*, entire document). It would have been obvious to one of ordinary skill in the art at the time of the invention to add to *Lee*, *Bruckert*'s method of determining a devices location simply based on cellular signals and without having to rely on GPS technology. This would have allowed *Lee*'s system to be implemented on vehicles that might have operated in locations that would have had difficulty obtaining a GPS signal. Furthermore, since *Lee*'s device would have already been equipped with cellular technology for other uses it would have allowed *Lee* to eliminate the GPS portion of his system completely and potentially reduce the cost of the device but at the same time sacrificing the accuracy of the GPS system for that of the cellular location system.

As pertaining to **claim 10**, *Lee* as modified above in claim 9 teaches that the frequency is the transmission frequency of a frequency modulated (FM) broadcast station (see *Lee*, col. 6 lines 61-62).

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As pertaining to **claim 11**, *Lee* as modified above in claim 9 teaches that the frequency can be the frequency transmission of a satellite transmitter (see *Lee*, col. 6 lines 61-62, *Lee* teaches that the device can receive RDS/RBDS, Band III, L-Band, S-Band, etc. digital audio broadcast DAB signals and these also can be tuned base don the received information).

As pertaining to **claims 12 and 13**, *Lee's* system as modified above in claim 9 further comprises a user interface electrically coupled to receive from the selection unit data arranged as radio signal content categories, and to output a menu of the categories to a listener which is output on a visual display (see *Lee*, col. 8 line 63-col. 10 line 19, and Fig. 4).

As pertaining to **claims 15 and 16**, *Lee's* system as modified above in claim 9 further comprises a user interface electrically coupled to receive and relay to the selection unit a user command, that can be verbal (see *Lee*, col. 10 lines 31-39), to select a particular content category in an arrangement of radio signal content categories stored in the selection unit (see *Lee*, col. 8 line 63-col. 10 line 19, and Fig. 4).

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Lee* as applied to claim 27 above, and further in view of *Bruckert*.

As pertaining to **claim 32**, *Lee* is silent on the concept of using a method other than GPS satellites in order to determine the location of his mobile device. *Bruckert* teaches a method by which a mobile cellular device's location is determined without the assistance of GPS satellites (see *Bruckert*, entire document). It would have been obvious to one of ordinary skill in the art at the time of the invention to add to *Lee*, *Bruckert's* method of determining a devices location simply based on cellular signals and without having to rely on GPS technology. This would have allowed *Lee's* system to be implemented on vehicles that might have operated in locations

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that would have had difficulty obtaining a GPS signal. Furthermore, since *Lee's* device would have already been equipped with cellular technology for other uses it would have allowed *Lee* to eliminate the GPS portion of his system completely and potentially reduce the cost of the device but at the same time sacrificing the accuracy of the GPS system for that of the cellular location system.

Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Lee* as applied to claims 1 and 9 above, and further in view of *Kennedy, II et al.* U.S. Patent 6,535,743 ("*Kennedy*").

As pertaining to **claims 6 and 14**, the claimed invention states that at least a portion of the menu is audibly output by the interface, however even though *Lee's* device also acts a navigation aid and presumably audibly reads directions and at least has a sound output when the menu is changed there is no explicit mention of this capability. It would have been obvious to one of ordinary skill in the art at the time of the invention to add to *Lee, Kennedy's* method for verbally outputting items that appear on the display of the mobile device. This would have allowed the driver who would have used *Lee's* device in a manner that would not have caused them to become distracted while driving.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

D. Steele et al. U.S. Patent Publication 2002/0046084 teaches a remotely configurable multimedia entertainment and information system with location based advertising.

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E. Kaku, European Patent Publication 0813302 teaches a broadcasting signal receiver.

F. McLellan, European Patent Publication 0964514 teaches a radio receiver using location-determining information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T Harry whose telephone number is 703-305-4749. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 703-305-4379. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

ATH
July 3, 2003



Marsha D Banks-Harold
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